

This listing of claims will replace all prior versions, and listings, of claims in the Application.

LISTING OF CLAIMS:

Claims

1. **(canceled)** A method of creating a pathway in a tract of a mammal, useful in association with a catheter having a tube coupled to a membrane initially positioned substantially inside the tube, the method comprising:
 - inserting the tube into an tract of the mammal; and
 - extending the membrane from an opening in the tube and into the tract, thereby creating the pathway in the tract, and wherein the membrane is extended in the tract without sliding action between the membrane and the tract.
2. **(canceled)** The method of claim 1 wherein the extension of the membrane is caused by pressure.
3. **(canceled)** The method of claim 1 wherein the tract is the cervical tract of the mammal.
4. **(canceled)** The method of claim 3 wherein the mammal is a human.
5. **(canceled)** The method of claim 1 wherein the tube has a tapered nozzle located at the opening of the tube.
6. **(canceled)** The method of claim 1 wherein the membrane is tapered.
7. **(canceled)** The method of claim 3 further comprising depositing genetic material into the mammal.
8. **(withdrawn)** A catheter useful for creating a pathway in a tract of a mammal, the catheter comprising:
 - a tube configured to be inserted into the tract of the mammal; and

a membrane initially positioned inside the tube, the membrane configured to extend from an opening in the tube and into the tract, and wherein the membrane extends without sliding action between the membrane and the tract.

9. (withdrawn) The catheter of claim 8 wherein the extension of the membrane is caused by pressure.
10. (withdrawn) The catheter of claim 8 wherein the tract is the cervical tract of the mammal.
11. (withdrawn) The catheter of claim 10 wherein the mammal is a human.
12. (withdrawn) The catheter of claim 8 wherein the tube has a tapered nozzle located at the opening of the tube.
13. (withdrawn) The catheter of claim 8 wherein the membrane is tapered.
14. (withdrawn) The catheter of claim 10 wherein the membrane is configured to deposit genetic material into the mammal.
15. (withdrawn) A method of creating a pathway in a tract of a mammal, comprising the steps of:
 - a) inserting a catheter into a tract of a mammal, said catheter comprising:
 - a tube having a proximal end opening for the introduction of a desired fluidic material into said tube, and a distal end opening for discharge of said fluidic material; and,
 - a thin flexible membrane initially positioned to extend inside said tube from a first end securely affixed to said tube in the vicinity of said distal end opening of said tube, said first end of said membrane defining a first end opening in fluid communication with said distal end opening of said tube, said membrane having a second opening at a distal tip thereof; and,
 - b) introducing fluidic material into said tube via said proximal end opening of said tube, the pressure of the fluid's introduction into said tube causing said flexible membrane to incrementally pass through the distal end opening of the tube so as to unfold in an inside out manner and extend within the tract releasing fluidic material through said opening at said distal tip.
16. (withdrawn) The method of Claim 15, wherein said step of inserting a catheter into a tract

comprises inserting said catheter in the reproductive tract.

17. (withdrawn) The method of Claim 15, wherein said step of inserting a catheter into a tract comprises inserting said catheter in the respiratory tract.
18. (withdrawn) The method of Claim 15, wherein said step of inserting a catheter into a tract comprises inserting said catheter in the circulatory tract.
19. (withdrawn) The method of Claim 15, wherein said step of inserting a catheter into a tract comprises inserting said catheter in the digestive tract.
20. (withdrawn) The method of Claim 15, wherein said step of inserting a catheter into a tract comprises inserting said catheter in the reproductive tract of a pig.
21. (withdrawn) The method of Claim 15, wherein said step of introducing fluidic material into said tube causing said flexible membrane to incrementally pass through the distal end opening of the tube so as to unfold in an inside out manner minimizes sliding action between said membrane and said tract during the unfolding.
22. (withdrawn) The method of Claim 15, wherein said fluidic material is released through said opening at said distal tip when the membrane becomes fully extended.
23. (withdrawn) The method of Claim 15, wherein said fluidic material is released through said opening at said distal tip when the membrane becomes fully extended into a uterus.
24. **(currently amended)** A catheter useful for creating a pathway in a tract of a mammal for the introduction of a desired fluidic material, the catheter comprising:

a tube configured to be inserted into a tract of a mammal, said tube having a proximal end opening for the introduction of a desired fluidic material into said tube, and a distal end opening for discharge of said fluidic material; **and,**

a nozzle securely affixed to said tube in the vicinity of said distal end opening of said tube; and,

a thin flexible single-walled membrane initially positioned to extend inside said tube from a first end securely affixed to said tube in the vicinity of said distal end opening of said tube, said first end of said membrane defining a first end opening in fluid communication with said distal end opening of said tube, said membrane having a second opening at a distal tip thereof, wherein during operation of said catheter the tube is inserted to a desired location in the tract of the mammal and the fluidic material is then introduced into said tube via said proximal end opening of said tube, the pressure of the fluid's introduction into said tube causing said flexible membrane to incrementally pass through the distal end opening of the tube so as to unfold in an inside out manner and extend within the tract releasing fluidic material through said opening at said distal tip.

25. **(previously presented)** The catheter of Claim 24, wherein said tube is configured to be inserted in a reproductive tract.
26. (withdrawn) The catheter of Claim 24, wherein said tube is configured to be inserted in a respiratory tract.
27. (withdrawn) The catheter of Claim 24, wherein said tube is configured to be inserted in a circulatory tract.
28. (withdrawn) The catheter of Claim 24, wherein said tube is configured to be inserted in a digestive tract.
29. **(previously presented)** The catheter of Claim 24, wherein said tube is configured to be inserted in a reproductive tract of a pig.
30. **(previously presented)** The catheter of Claim 24, wherein said tube is configured to be inserted in a reproductive tract and said membrane may be fully extended into the uterus.
31. (withdrawn) The catheter of Claim 24, wherein said tube and said membrane are configured so that the membrane unfolds in a manner that minimizes sliding action between said membrane and said tract during the unfolding.

32. (withdrawn) The catheter of Claim 24, wherein said tube and said membrane are configured so that fluidic material is released through said opening at said distal tip step when the membrane becomes fully extended.
33. (withdrawn) The catheter of Claim 24, wherein said membrane is formed of latex.
34. (withdrawn) A method of creating a pathway in a tract of a animal, comprising the steps of:
- a) inserting a catheter into a tract of a animal, said catheter comprising:
 - a tube having a proximal end opening for the introduction of a desired fluidic material into said tube, and a distal end opening for discharge of said fluidic material; and,
 - a thin flexible membrane initially positioned to extend inside said tube from a first end securely affixed to said tube in the vicinity of said distal end opening of said tube, said first end of said membrane defining a first end opening in fluid communication with said distal end opening of said tube, said membrane having a second opening at a distal tip thereof; and,
 - b) introducing fluidic material into said tube via said proximal end opening of said tube, the pressure of the fluid's introduction into said tube causing said flexible membrane to incrementally pass through the distal end opening of the tube so as to unfold in an inside out manner and extend within the tract releasing fluidic material through said opening at said distal tip.
35. (withdrawn) A catheter useful for creating a pathway in a tract of a animal for the introduction of a desired fluidic material, the catheter comprising:
- a tube configured to be inserted into a tract of a animal, said tube having a proximal end opening for the introduction of a desired fluidic material into said tube, and a distal end opening for discharge of said fluidic material; and,
 - a thin flexible membrane initially positioned to extend inside said tube from a first end securely affixed to said tube in the vicinity of said distal end opening of said tube, said first end of said membrane defining a first end opening in fluid communication with said distal end opening of said tube, said membrane having a second opening at a distal tip thereof, wherein during operation of said catheter the tube is inserted to a desired location in the tract of the animal and the fluidic material is then introduced into said tube via said proximal end opening of said tube, the pressure of the fluid's introduction into said tube causing said flexible membrane to incrementally pass

through the distal end opening of the tube so as to unfold in an inside out manner and extend within the tract releasing fluidic material through said opening at said distal tip.

36. **(new)** A catheter useful for creating a pathway in a tract of a mammal for the introduction of a desired fluidic material, the catheter consisting essentially of:

a tube configured to be inserted into a tract of a mammal, said tube having a proximal end opening for the introduction of a desired fluidic material into said tube, and a distal end opening for discharge of said fluidic material;

a nozzle securely affixed to said tube in the vicinity of said distal end opening of said tube; and,

a thin flexible single-walled membrane initially positioned to extend inside said tube from a first end securely affixed to said tube in the vicinity of said distal end opening of said tube, said first end of said membrane defining a first end opening in fluid communication with said distal end opening of said tube, said membrane having a second opening at a distal tip thereof, wherein during operation of said catheter the tube is inserted to a desired location in the tract of the mammal and the fluidic material is then introduced into said tube via said proximal end opening of said tube, the pressure of the fluid's introduction into said tube causing said flexible membrane to incrementally pass through the distal end opening of the tube so as to unfold in an inside out manner and extend within the tract releasing fluidic material through said opening at said distal tip.